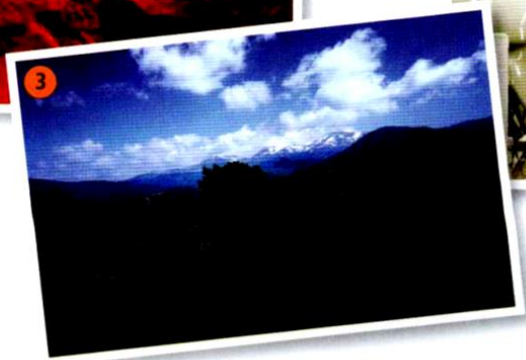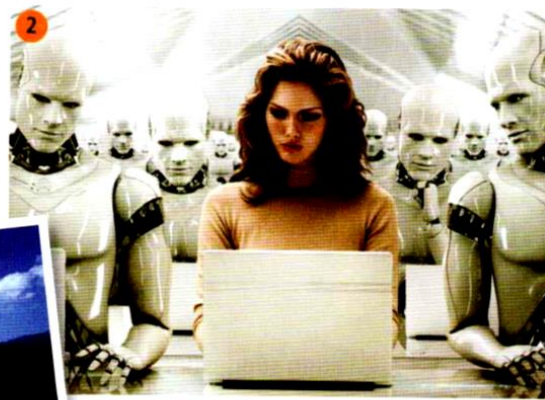# Chapter 4: The Future

Language focus: Ways of looking at the future

1 ⬤ Work in groups. Look at the pictures below. Which represents your view of what the future will look like? Why?

2 ⬤ Work in pairs. Discuss the questions below.

Do you think machines will control our lives in the future? In what ways? Give reasons.

How do you think machines will improve our lives in the future?

Do you think it is possible that machines will control or govern the planet in the future?

3 Read statements 1–6 below and decide whether each is a prediction, plan or fixed schedule.

1 We're going to visit a science exhibition this afternoon.

2 I'm leaving in 50 minutes.

3 I think people will be living on Mars in 20 years.

4 By 2050 machines like robots will have taken over our world.

5 Civilization as we know it will no longer exist. It will be very advanced technologically.

6 The space shuttle to the moon lifts off at 10pm.

4 Match descriptions a–f below to sentences 1–6 in exercise 3

a The present continuous tense is used for fixed arrangements.
b *Going to* is used for intentions or plans.
c The future simple tense is used for predictions or instant decisions.
d The future continuous tense is used for a situation which will be happening at a particular time in the future.
e The future perfect tense is used for a completed action at or before a point of time in the future.
f The present simple tense is used for events that relate to a schedule/timetable.

⬤ Read more about different ways to talk about the future in the Grammar reference on page 222.

5 For 1–5 below, underline the two verb phrases and match them to a description a–f in exercise 4.
1 As we're flying tomorrow morning at 8 am, shall I arrange an alarm call for 5 am?
2 Why are the government going to spend less money on technological research in the future? I think it'll do a lot of harm.
3 By tomorrow, we'll have completed the computer project and it'll be working perfectly.
4 Some people believe robots are going to be the next big techno craze, but it won't last long.
5 When she arrives tomorrow, she'll be carrying a red bag.

6 For **1–5** below, replace the verb that is in the wrong tense.

1 People will be living in space in the year 2050, but will they really have enjoyed it?

2 According to the timetable, the train arrives at noon. I'll sit at the front if you are looking for me.

3 I'm staying at the Braganza Hotel for four days next week, so I'll have met you on Tuesday.

4 The government are going to change the law next month. At least that's their intention, but I bet something is happening to make them change their minds.

5 The public will have become better informed about healthy eating by then, and are thus going to improve their general well-being.

7 Work in pairs. For sentences **1–6** below, decide whether you can rewrite each one using the tense in brackets. Decide what the difference is.

1 I'll be seeing the doctor next Wednesday at 2.00. (present simple)

2 Society is not going to change dramatically by 2030. (future perfect)

3 The ageing population is going to cause more problems in terms of cost in the future. (present continuous)

4 The world will certainly have changed for the better by then. (going to)

5 The human race will be living in more closely-knit communities in the future. (simple future)

6 My diary is full, but perhaps I'll be able to meet you on Saturday. (going to)

8 ◯ Work in pairs. Make predictions about what your life will be like next year, five years from now and ten years from now. Give reasons and examples.

Vocabulary 1: Adjective/noun collocations

1 Work in pairs. For **1–8** below, use an adjective from the box to replace the words in *italics* to make a common collocation. Place the adjective before the noun.

1 a civilization *that is current and contemporary*

2 societies *that live off the land*

3 a culture *that is stronger than other cultures*

4 communities *that are doing well and are successful*

5 the public *that is made up of ordinary people*

6 populations *that live in towns and cities*

7 the elite *that controls and runs a country*

8 a people *that live in a particular region*

| general | governing | agricultural | indigenous |
| modern | dominant | thriving | urban |

2 Complete each gap in the paragraph below with one of the noun collocations from exercise 1.

The **1** _____ has widely different views about what life will be like in years to come. Some pessimists predict that **2** _____ as we know it will collapse in the near future, and that people will end up living in **3** _____ just as their ancestors did before the Industrial Revolution. Others think that **4** _____ will increase in size so much that there will be no agricultural land left, and that there will be one **5** _____ rather than the multicultural world of today with a **6** _____ made up of robots controlling everything and everyone.
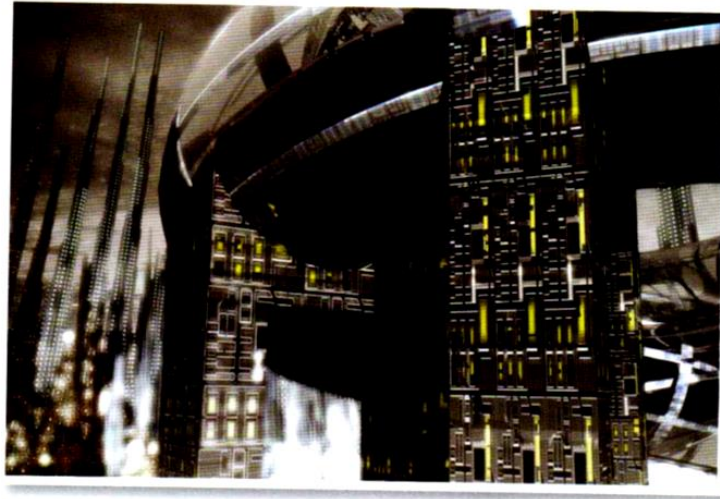
2

Speaking
IELTS Part 3

1 ● Work in pairs. Use the picture below to help you talk about the world in the future. Describe the following:

- what will be happening
- what will happen
- what will have happened

Useful expressions

In 10/20/50/100 years' time …
Over the next century …
Before the end of the century …
By the time we reach the end of the century …
In the coming decades …

2 ● Work in pairs. Look at the Part 3 questions below. Then take turns asking and answering the questions. When you have finished, give each other feedback using the checklist on page 210.

Don't forget!

- In Part 3 you need to talk in more abstract terms.

Robots

Do you think we should be pessimistic about machines like robots taking over our lives? Why?/Why not?

What do you think are the advantages and disadvantages of using machines like robots?

The world in the future

In what ways do you think society will change in the future?

How do you think modern civilization will develop over the next half century?

Do you think humans will be living on another planet in the future? Why/Why not?

Why do you think people make predictions about the future?

Listening
IELTS Section 1

1 You will hear someone enquiring about and booking an exhibition. Before you listen to the conversation, check the meaning of the following words and phrases.

1 booking office
2 preview
3 the week after next
4 restrictions
5 sign up for
6 come up
7 register

Don't forget!

- Read the questions and check whether numbers or words are required.
- Check if there are any answers that may contain plural nouns.

1.9 SECTION 1   Questions 1–10

Questions 1–6

Complete the notes below.

Write **NO MORE THAN TWO WORDS AND/OR A NUMBER** for each answer.

Notes on Exhibition

Example	Answer
Title of Exhibition: Robots: the end of *modern civilization*	

Two free:	**1** ....
Day(s) exhibition full:	**2** ....
Days chosen by caller:	**3** .... and ....
Reference number:	**4** ....

Eating facilities

- 15 restaurants
- Including **5** .... cafés
- Local restaurants putting on **6** ....

Questions 7–10

Accommodation

- Halls of Residence £30 a night
- Hotels from about £30 to approximately **7** £ ....

Transport Links

- Within walking distance of the station and **8** .... from the airport
- It is possible to catch bus number **9** ....
- A taxi costs no more than **10** £ ....

2   Do you like going to exhibitions?

Do you like to book in advance or do you like to turn up on the spur of the moment?

Would you go to an exhibition on robots? Why/Why not?

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Word building: Forming adjectives from nouns

1 Work in pairs. Make adjectives from the nouns in the box below and add them to the correct column in the table.

| use | luxury | technology | success | population | space |
| beauty | agriculture | tradition | nation | danger | industry |

Adjectives ending -al	Adjectives ending -ous	Adjectives ending -ful

2 For **1–8** below, complete the gaps with a suitable adjective from exercise 1.

1 At the moment some houses in my community are very _____ , but in the future they will not be so big.

2 I cannot say it is a _____ society at the moment, but as the Internet and computers spread that will change.

3 The area where I was brought up is very _____ with lots of trees and stunning gardens, but I think all this beauty will be destroyed by future developments.

4 My home town still survives on the production of _____ crafts, but I think that modern industry is beginning to creep in.

5 We have many _____ monuments, but people forget what important events they signify.

6 _____ office blocks with all the latest modern facilities and expensive furniture will replace old factories and buildings.

7 I come from one of the most _____ regions of the world, and I think it will become even more crowded in the future.

8 My home town is _____ at attracting tourists, but it's not in danger of becoming overwhelmed yet.

3 ⬭ Work in pairs. Choose one or more statement from exercise 2 that relates to you. Explain the statements you have chosen. Give reasons and examples.

Reading
IELTS Reading Passage

Glance quickly at the title, sub-title and the passage as a whole and write down at least five points that you think the text will contain. Then answer the following questions:

• what made you choose the five points you wrote down?

• what do you think the word *pragmatics* might mean in the sub-heading?

READING PASSAGE

You should spend about 20 minutes on **Questions 1–13**, which are based on the reading passage below.

As Japan builds a new generation of robot companions, U.S. firms focus on pragmatics.

Meet Wakamaru and Roomba, two householdhelper robots with very different pedigrees. Wakamaru, from Mitsubishi Heavy Industries, is a waist-high bot with a canary yellow exterior and limpid eyes. It can recognize 10,000 Japanese words, identify eight family members by face or voice, remind you to make an appointment or make your beds and, if somebody breaks into your house, send photographs of the intruder to your mobile phone. When the machine rolled off the assembly line in 2005, Mitsubishi expected U.S. sales to reach 10,000 models a year, despite the bot's $15,000 price tag. Instead, the company filled only a few dozen orders. Wakamaru is now off the market and being rented out as a receptionist at $1,000 a day.

Roomba, by contrast, looks more like an appliance than a robotic friend. The frisbee-like disc's sole purpose is to vacuum, which it does automatically, thanks to sensors that adjust the settings to suit different floor types, avoid drop-offs like stairs and navigate between table legs and household pets. Starting price: $130. Massachusetts firm iRobotCorp. has sold more than 3 million of the machines.

Wakamaru and Roomba represent radically different approaches to the next big thing in robotics: the use of robot assistants in the office, hospital and home. The Japanese, who have long been fascinated by the robot as android, are concentrating on making machines that look and act like human beings. U.S. firms, on the other hand, have eschewed the flashier android approach and instead are emphasizing products that, like Roomba, are narrowly targeted to specific tasks like mowing lawns, cleaning pools and taking patients' vital signs.

So far, the success of Roomba suggests that the U.S. firms have the upper hand. But the race is only beginning and the stakes are potentially huge. The market for personal and service robots is about $3 billion now, but is expected to reach $15 billion by 2015, according to the Japan Robotics Association and market analysts like ABI Research. In 10 years or so, experts predict, sales of personal robots could surpass sales of industrial robots, now about $4.6 billion a year.

The issue for robot developers is whether the technology of artificial intelligence will allow Japanese developers to fulfill their vision of friendly robots capable of working alongside people. If so, Japan could be in a position to dominate the next phase of robotics. If not, the Americans, with their pragmatic but uninspiring designs, could win the race.

Japan approaches this new market from a position of strength. Over the past 50 years, it has become the undisputed leader in industrial robots, supplying 40 percent of the world market. At the same time, Japanese pop culture has become saturated with images of friendly droids from Manga cartoons and animé, and bots by Sony and Honda are as famous in Tokyo as Jessica Simpson is in Texas. Japan's robot industry — with the help of $100 million in research funding from the government — is driven in large part by the dream of a day when droids will aid humans in almost every aspect of daily life.

There's the egg-shaped PaPeRo — recently rated the most popular bot in Japan by Robot Life magazine — which works select day-care centers, singing songs and reading e-mails to children according to texted instructions from parents. There's Actroid, a mannequinesque gynoid who wows corporate guests with her dynamic facial expressions and cheeky conversation skills (ask her how much she weighs, and she'll tell you what she can bench-press).

Japanese and American firms have their eyes on the same prize: the market for home health care, particularly for the elderly. As baby boomers hit retirement age, the need to monitor and assist seniors will create a surge in demand for personal-care robots, experts say. Since 2001, the Japanese government has spent $210 million on research to meet its goal of deploying robots to support its aging workforce. (It's timeline specifies that bots should be able to straighten a room by the end of this year, make beds by 2013, and help with baths and meals by 2025.) The desire to field human-like robots, however, is an impediment. Honda, for instance, decided to keep its Asimo robot bipedal, even though its two feet are impractical in homes with stairs and clutter. The one field in which Japanese robots have a clear lead requires no practical applications: entertainment robots, a $185 million market that is expected to rise to $3 billion by 2014, according to private research firms.

All this grass-roots robotics innovation has led tech giants to predict that in the next twenty years, robots could be the biggest technological revolution since PCs and the Internet. Whether these robots are cleaning up homes or serving as co-workers, entertainers and friends depends on which vision wins out.

How to go about it

For questions **1–7**:

- Skim the summary to decide whether it relates to the whole passage or part of it.
- This summary does not have a title so look at the title of the passage.
- Check the word limit for each answer.
- Always think about the types of words that are needed, for example, nouns, verbs, adjectives etc.
- Do not write any words on the answer sheet that are paraphrased in the summary.

For questions **8–11**:

- Read the stem and underline any words that you think will be paraphrased.
- Read each alternative as a complete sentence by combining it with the stem.
- Locate the information in the text.

For questions **12 and 13**:

- Use names, numbers and paraphrases of the nouns in the questions to help you locate the answers in the passage.

Questions 1–7

Complete the summary below.

Choose **NO MORE THAN TWO WORDS** from the passage for each answer.

When Wakamaru first appeared on the market, Mitsubishi forecast robot sales in thousands in the US, but sales figures were very low. The robot is now on hire as a **1** .... Roomba, an American robot which was designed only to **2** .... , has sales running into the millions. These two machines symbolize two very **3** .... in the world of robot technology. The Japanese focus is on making machines that behave like **4** .... , while the U.S. are concentrating on robots that do specific tasks. In effect, the choice is between friendly robots working with people or machines that are **5** .... but boring. Japanese and American firms are after the same market: health provision at home, especially for **6** .... Tech giants project that in the coming decades there is a possibility robots will be the most important **7** ....

Questions 8–11

Choose the correct letter **A**, **B**, **C** or **D**.

8 Wakamaru is

   A   the same height as a human being.

   B   shorter than a human being.

   C   heavier than a human being.

   D   quicker than a human being.

9 The purpose of Romba's sensors is to help it

   A   move around objects.

   B   navigate the stairs.

   C   polish different surfaces.

   D   clean household pets.

10 US firms prefer robots

   A   that are very cheap to make.

   B   that can act as companions.

   C   that focus on designated tasks.

   D   that look like humans.

11 The battle in artificial intelligence is between

   A   creating practical robots and friendly robots.

   B   producing cost effective and attractive robots.

   C   building fast and efficient robots.

   D   making elegant and industrial robots.

Questions 12 and 13

Answer the questions below.

Choose **NO MORE THAN TWO WORDS AND/OR A NUMBER** from the passage for each answer.

12 What has Japan's position been in the industrial robots market over the past half century?

13 What was the Japanese government's expenditure on research into using robots to help elderly workers?

Reacting to the text

Would you like to have a robot in your home? Why/Why not?

How soon do you think robots will be commonplace in people's homes?

Do you think we have anything to fear from the development of robots, or can they only be beneficial? Give reasons and examples.

Vocabulary 2: Verbs of prediction

1   Underline the four verbs in the box below that cannot be used to indicate prediction in an IELTS Writing Task 1 answer.

predict	prophesy	forecast	assume	foretell
project	estimate	anticipate	expect	foresee

2   Decide what the noun and adjective is for the correct verbs in exercise 1.

3   Rewrite sentences **1–8** below using the words which follow each sentence.

Example:

It is predicted that computer sales will account for 20 per cent of the total

… are predicted …

Computer sales are predicted to account for 20 per cent of the total.

1 By the year 2030 the population will have increased to nearly 70 million.
   … it is estimated …
2 Spectator numbers will be rising dramatically towards the end of the year.
   … are forecast …
3 The projected sales next month will be lower than this month.
   It is …
4 It is forecast that passenger numbers will increase substantially.
   The forecast is …
5 Sales will climb at the rate of 20 per cent a year.
   … predicted …
6 Attendances will decline gradually in the next two years.
   … are anticipated …
7 Advances in technology are not expected to slow down in the coming years.
   It is expected …
8 The estimated recovery in ticket purchases will happen in the third quarter.
   … are estimated …

8

Writing:
IELTS Task 1

What to expect in the exam

- Pie charts indicate proportions. They can contain percentages adding up to 100%, as in the example here, or they can contain units in proportions that add up to more than 100. They can show changes over time in different pie charts, or all relate to the same year.

1 Look at the Task 1 question below. Then for **1–12** in the model answer below, put the verb in brackets into the correct tense.
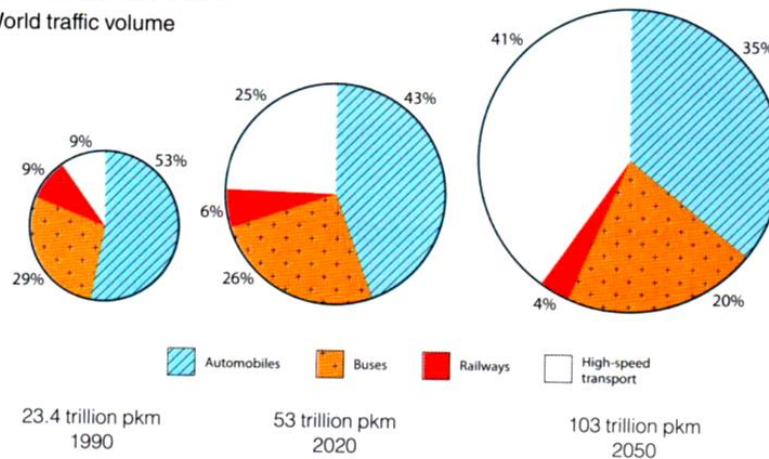
WRITING TASK 1

You should spend about 20 minutes on this task.

> *The charts below show the world traffic volume measured in passenger-kilometre-miles.*
>
> *Summarise the information by selecting and reporting the main features, and make comparisons where relevant.*

Write at least 150 words.

World traffic volume

| Automobiles | Buses | Railways | High-speed transport |

23.4 trillion pkm — 1990
53 trillion pkm — 2020
103 trillion pkm — 2050

The pie charts (**1** show) the changes in the proportions of pkm for a range of different forms of transport every thirty years between 1990 and 2050 along with the total number of passenger kilometres.

The most striking feature of the chart (**2** be) the rise in traffic volume from high-speed transport. It (**3** expect) to see a dramatic increase, climbing from just 9% of traffic volume in 1990 to 25%, and then 41% in 2020 and 2050 respectively. By contrast, it (**4** predict) that there will be fewer automobile pkm, which (**5** shrink) from 53% of market share to 43%, and to 35% in 2050.

While railways (**6** see) the most significant fall in traffic volume percentage-wise, it (**7** anticipate) that buses (**8** fare) better. The former (**9** represent) 9% of total traffic volume in 1990, but the projected figure for 2050 (**10** be) just 4%, a drop of more than 50%. This (**11** compare) with traffic volume for buses in 2050 of 20% against 26% in 2020, and 29% in 1990.

It is clear that high speed transport (**12** expect) to increasingly dominate the market.

2 Underline the linking words in the model answer.

3 Find examples in the model answer where the pronouns *it* and *this* and the phrase *the former* are used to connect ideas between sentences. What does each one refer to?

4 For **1–5**, underline two suitable words or phrases in *italics* to link the information. Use the punctuation to help you.

   1 By 2020 it is predicted that more of the total traffic volume of the total 53 trillion pkm will be accounted for by high-speed transport than in 1990 (25% against 9%). *By contrast/While/By comparison* automobiles are expected to account for 43% and 53% in the respective years.

9

2 In the year 2050 it is projected that high-speed transport will account for 41% of total traffic volume. *By contrast/Whereas/Meanwhile*, bus use is expected to shrink to 20%.

3 In 1960 automobiles accounted for 54% of the traffic volume, *but/whereas/in contrast* high-speed transport represented only 3%.

4 The majority of traffic volume was made up of automobiles in 1990 at 53%. *Meanwhile/But/By contrast*, buses accounted for 29%, with the railways and high-speed transport coming next with 9% each.

5 The proportion of passenger traffic miles accounted for by automobiles is expected to decrease to 43% by 2020, *whereas/whilst/meanwhile* it is forecast that the pkm for railways will shrink by a smaller amount: 29% to 26%.

5 Use the lists of words in **1–4** below to write your own sentences about the pie charts in exercise 1. Add the relevant data from the charts.

  1 high-speed transport account for traffic volume in 1990 while in 2050 forecast represent

  2 estimate proportion traffic volume automobiles 2050 in contrast to 1990

  3 in 1990 automobiles make up bulk passenger kilometres but 2050 this forecast drop to

  4 in 1990 out of a total traffic volume of 23.4 trillion pkm automobiles account for buses, railways and high-speed transport respectively by comparison by 2020 anticipate high speed transport jump automobiles buses railways

6 Write your own answer for the Task 1 question below. When you have finished, check your answer using the checklist on page 209.

WRITING TASK 1

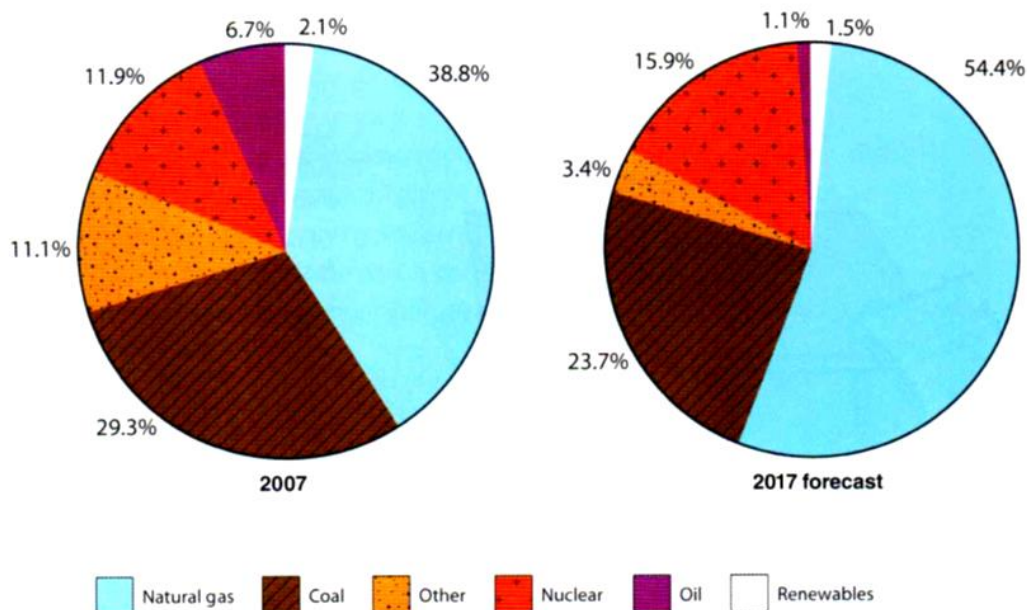You should spend about 20 minutes on this task.

> The charts below provide information about energy generation by fuel type in Florida in two separate years.
>
> Summarise the information by selecting and reporting the main features, and make comparisons where relevant.

Write at least 150 words.

Energy generation by fuel type

2007

2017 forecast

Natural gas   Coal   Other   Nuclear   Oil   Renewables

Language focus 1

Grammar reference on page 222 of the coursebook.

Ways of looking at the future

1 Use the prompts to write sentences about the future using the tense shown in brackets. Then match each sentence **1–5** to its meaning **a–f**.

Example:

world's population/stabilize (future simple)

…The world's population will stabilize……………………………………… [b]

1 I/try/hard/to reduce/carbon emissions (going to)

…………………………………………………………………………… [ ]

2 world's economies/meet/each year/to agree on/policies (present simple)

…………………………………………………………………………… [ ]

3 by 2050/a machine/invent/that/can read/people's minds (future perfect)

…………………………………………………………………………… [ ]

4 near future/most people/live/robots/homes (future continuous)

…………………………………………………………………………… [ ]

5 politicians/meet/Geneva/next week (present continuous)

…………………………………………………………………………… [ ]

a This is the person's intention.

b This person is certain that this will happen.

c This event will have happened sometime before a point in the future.

d They have planned/arranged to do this.

e This is a timetabled event.

f This event will be in progress at a specific point in the future.

2 Complete the news report below by putting the verbs in brackets into a suitable future tense.

Ministers **1** ………………………… (meet) in Paris next week to discuss the environment. This meeting **2** ………………………… (happen) every year but what makes this one different is that for the first time they **3** ………………………… (agree) on how they can reduce the amount of carbon emissions each country produces. It is hoped that by working together the ministers **4** ………………………… (set) realistic targets that all countries can achieve by the year 2050. By this time, more than 70 years **5** ………………………… (pass) since finding out about the damaging effects of global warming. These targets should mean that in the year 2050 the air we **6** ………………………… (breathe) should be cleaner than now.

11

(**Vocabulary 1**)

Wordlist on page 214 of the coursebook.

Adjective/noun collocations

1   Use the collocations below (a–h) to complete the definitions (1–8).

> a   An agricultural society
>
> b   The general public
>
> c   A thriving society
>
> d   The governing elite
>
> e   A dominant society
>
> f   A modern civilization
>
> g   An indigenous population
>
> h   An urban population

1   ....   refers to the people in control in a country.

2   ....   is one that is stronger than others.

3   ....   lives off the land.

4   ....   is made up of ordinary people in a society.

5   ....   does not live and work in rural areas.

6   ....   has the earliest historic connections to a region.

7   ....   is a group of people who are doing well.

8   ....   is related to the contemporary world.

2   Read the titles of the books below (1–8) and then match them to their content using the collocations above (a–h). An example has been done for you.

TITLE	CONTENT
1 21st Century Living	[f] . A modern civilization ....
2 The Farmers of the Sahara	[ ] ....
3 World Leaders	[ ] ....
4 Living Together Successfully	[ ] ....
5 The People's Voice	[ ] ....
6 City Dwellers	[ ] ....
7 People in Power	[ ] ....
8 The Aboriginals: Original Inhabitants of Australia	[ ] ....